

Abstract

A method and apparatus is described for recording and digitizing intensity profiles (IP) of the papillary structure of the skin with high intensity resolution using sensors S with low intensity resolution. For this purpose, a plurality of digital image signals (DS, DS1, DS2) of an identical subarea e.g. of a fingerprint are recorded, whereby the continuous intensity domain (KI) of the fingerprint is scanned in different intensity resolutions, and/or different portions (A1, A2) of said continuous intensity domain (KI) are mapped to discrete intensity domains of the single digital image signals (DS, D1, DS2). By the pixelwise combination of all digital image signals (DS, DS1, DS2), a digital fingerprint image signal (PS) is finally produced whose discrete intensity domain (DI) represents a larger portion of the continuous intensity domain (KI) of the fingerprint and/or has a higher resolution intensity than each single one of the digital image signals (DS, DS1, DS2).